GEOVENT

USER MANUAL

ASA-3 & ASA-4 ARM

Extraction arm ø50, ø80, ø100, ø125, ø160 og ø200 mm

Version 2.0 01.05.13

www.geovent.dk

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1.0 General safety precautions

IMPORTANT – Please study all the instructions before mounting and commissioning.

Please keep these instructions in a safe place and instruct all users in the function and operation of the product.

Do not dismantle any factory-mounted parts, since it impedes the commissioning of the equipment.

All electrical installations must be carried out by an authorised electrician.

1.1 Danger

Explosive media – The Extraction Arm is not suitable for the extraction of aluminium dust, flour, textile dust nor for sawdust or other media, which are connected with danger of explosion, without specific approval from Geovent A/S.

Placing the hand between the gas spring and the carrying arm could involve a risk of mutilation.

Boring in the gas spring or other ways of puncturing it is deadly dangerous.

1.2 Field of application

The GEOVENT ASA-3 Arm is the ideal Extraction Arm for the extraction of welding smoke, grinding dust, fumes, etc., where the well-being of the operator is in focus with regard to lightness, ergonomics and efficiency of the Arm.

The Extraction Arm is not suitable for the extraction of aluminium dust, flour, textile dust nor sawdust or other media, which are connected with danger of explosion, without specific approval from Geovent A/S.

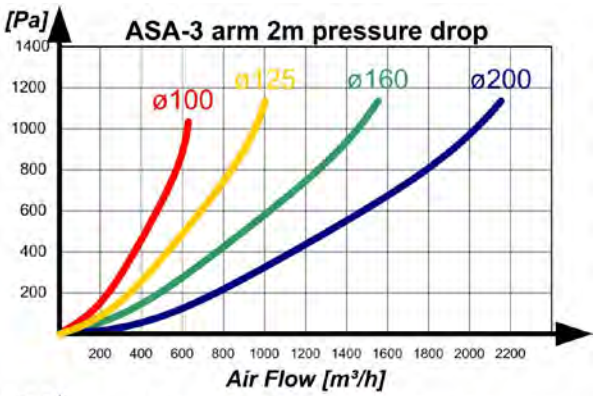
The hose may be damaged and leaky via outer loads, e.g. by a screw driver. Avoid such load in order to safeguard a long life.

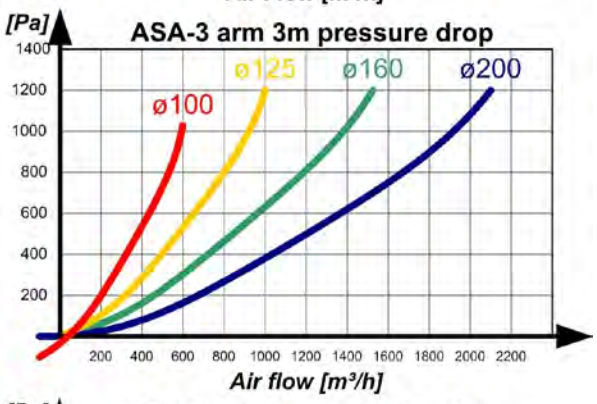
1.3 Technical data

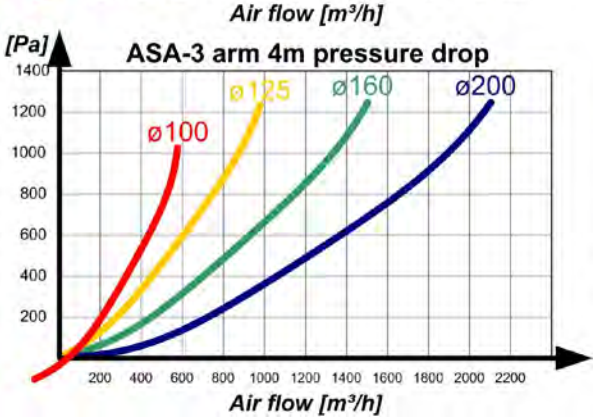
Recommended flow area

Hose dimension:	Volume of air:
Ø80	200-300 m³/h
Ø100	300-450 m³/h
Ø125	450-800 m³/h
Ø160	800-1200 m³/h
Ø200	1200-2000 m³/h

Length:	2 or 3 m
By means of an extension arm up to:	7 m
Hose max. temp. (depends on the type)	Up to 150°C







1.4 Construction

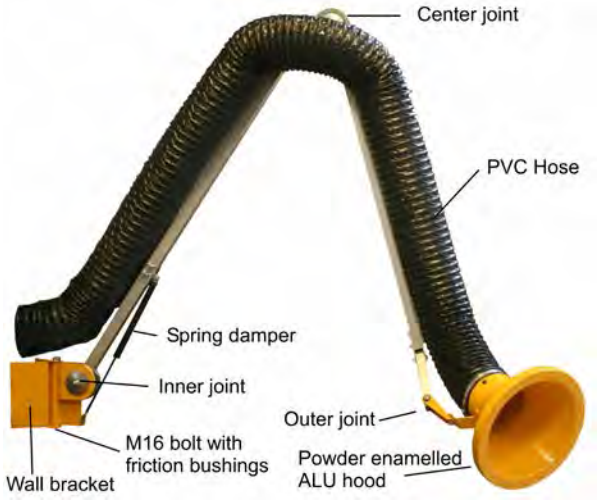
Wall bracket: Steel bracket, powder enamelled yellow in RAL 1007. The rotary joints can rotate 270°.

Funnel: Light-weight aluminium funnel ø80, 100, 125, 160 or 200 mm. The Ø160 and the ø200 mm funnels are supplied with integrated handle. The funnel is powder enamelled in RAL 1007. May be rotated in all possible positions.

Arms and friction joint: 25x25 mm aluminium pipe, connected via knee joints with friction discs and disc springs. The inner reinforced arm is executed in 30x30 mm electro galvanised steel pipe and supplied with a gas damper.

2.0 Installation

The ASA-3 Arm is supplied partly assembled. Depending on model, it may consist of 1 partly assembled carrying arm, 1 funnel and 1 set of hose with clamp. The centre part of the carrying arm is to be turned around and fastened with two 13 mm fixed spanners.



Before mounting the Arm, please make sure that the optimum working area is selected. Is there space enough for the satisfactory utilisation of the Arm? What about connection possibilities for piping and automatics? The optimum installation height is then to be selected in accordance with the table below:

Recommended installation height ASA-3 Arm:

2 m	2500 mm
3 m	2500 mm
4 m (incl. 1 m extension arm)	2500 mm
5,5 m (incl. 2.5 m extension arm)	2500 mm
7 m (Incl. 4 m extension arm)	2500 mm

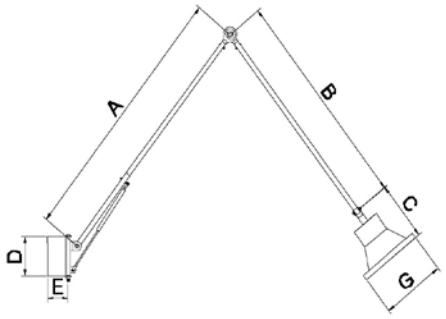


Table of dimensions - Arm

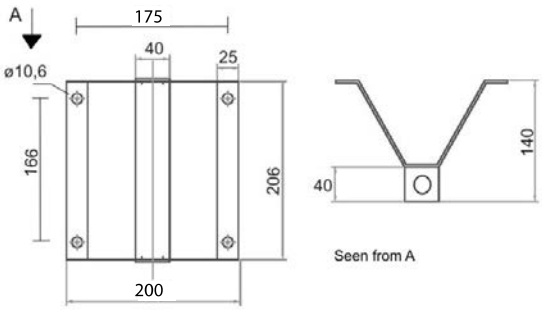
Length	A [mm]	B [mm]	D [mm]	E [mm]	F [mm]
2.0 m	920	680	206	120	200
3.0 m	1420	1180	206	120	200

Table of dimensions - funnel

Funnel	C [mm]	G [mm]
Ø80	180	178
Ø100	180	198
Ø125	180	223
Ø160	318	360
Ø200	318	360

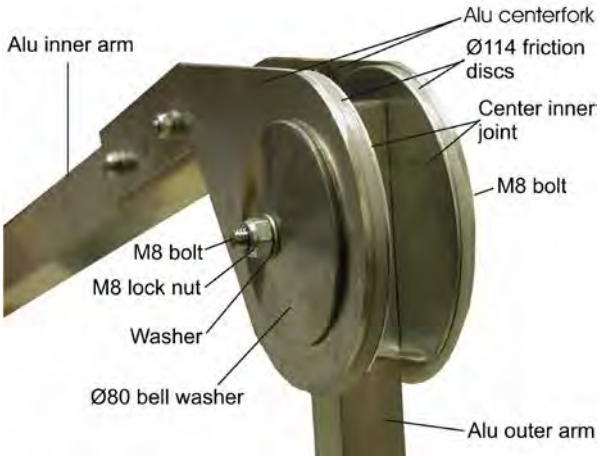
Procedure:

1. The wall bracket is firmly attached to the wall by means of 4 off 10mm bolts. (When using the extension arm, please fix this bracket first – refer to item 2.1)

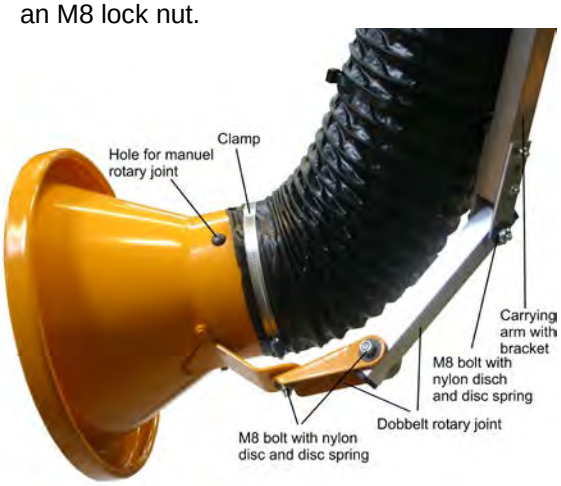


2. Mount the Arm on the wall bracket with the M16 bolt and friction discs. Make sure to fasten it in such way that the Arm is easily rotated. If the inner joint/arm hasn't the wanted friction, the bell washer can be loosen or tighten, or by adjusting the spring retainer (against the wall to tighten – away from the wall to loosen).

3. Mount the centre part by taking the supplied M12 bolt through 3 disc springs, the alu half, the friction disc, the other alu half and 3 disc springs and fasten them with an M12 lock nut. Tighten the joint so that the arm is easy to rotate, however, still so much that it is self-retentive in a lightly bent position.



4. Mount the funnel on the outer joint by taking the supplied M8 bolt through 3 disc springs, the alu half, the friction disc, the other alu half and the 3 disc springs and fasten them with an M8 lock nut.


Clamp
Hole for manuel rotary joint
Carrying arm with bracket
M8 bolt with nylon disch and disc spring
Dobbelt rotary joint
M8 bolt with nylon disc and disc spring

5. The hose is mounted on the funnel by tightening the clamp around the funnel and the hose. Now pull out the hose to max. so that the least possible resistance is left in the hose and fasten with the enclosed plastic binders. Subsequently, the hose is mounted on the branch pipe by means of the clamp.

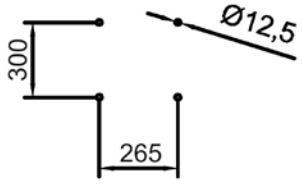
2.01 ASA-4

The aluminum pipes are mounted on the pipe-holders with the supplied self-tapping screws. The shortest of the pipes are mounted on the outer arm. Then mount the hose pieces for the bends. The rubber band is put on the outside of the pipe/funnel, then pull the hose over the pipe and secure it with clamps. When the hose is attached, the rubber band is pulled over the clamp.

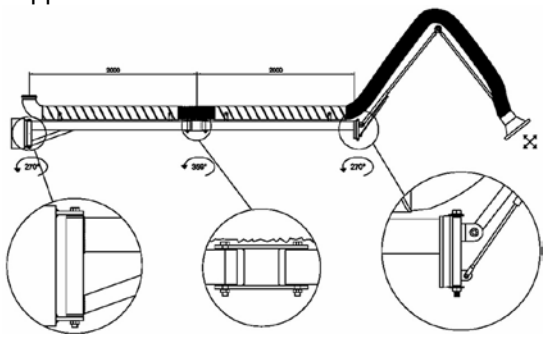
2.1 Mounting of optional equipment

Mounting of extension arm

Start by fixing the extension arm to the wall, as described in item 2.0 (applies to 1.0 and 2.0 m extension arms). For the 2.5 and 4.0 m extension arms, please fix the wall bracket first. (Refer to the hole dimensions).



At 4 meters, every joint is assembled and then the Arm is mounted. Next, the spiro pipe is fastened to the extension arm by means of the enclosed self-cutting screws. The part between the spiro pipes is assembled by means of clamps and the supplied hose.



Mounting of the damper
Is factory-mounted. Contact your dealer.

Mounting of light
The mounting of light and net should have been taken care of by the factory. The connection is made by extending the power cord, which is attached inside the Arm and it is to be fixed on the Arm. Next, the power cord is connected to the transformer (24V → 220V) which again is connected to the mains.

Light specifications:

Type:	Halogen
Power:	50 W 60°
Voltage:	12 V
Recommended trafo-power:	70 W

2.2 Power connection

For connection of various electrical components (e.g. light sensor), please refer to the enclosed documentation for the actual product.

The electrical installation is to be carried out by a certified electrician.

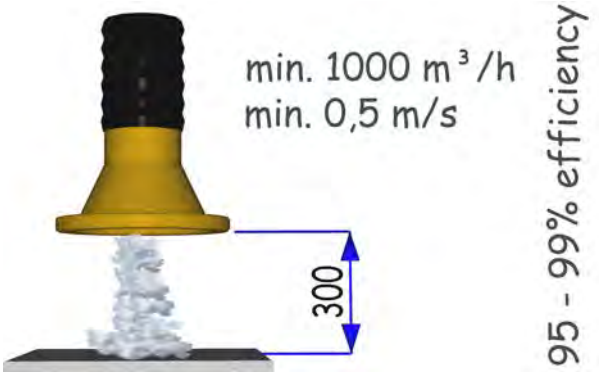
2.3 Trial run – exact adjustment

After the final mounting, the ASA-3 Arm should be adjusted to the typical working area, for optimum utilisation of the Arm. Do so by adjusting the rotary joints mentioned in item 2 by means of 2 off 17 mm fixed spanners.

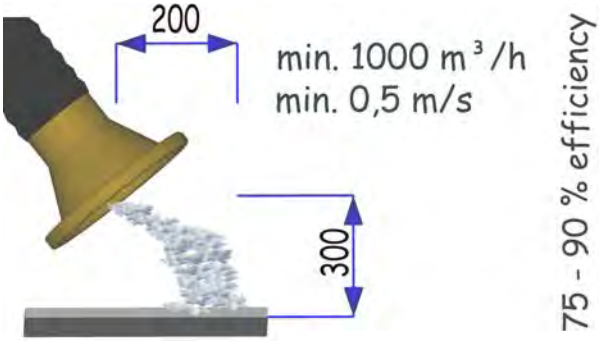
3.0 User instruction – application

For normal use, the Arm is to be self-retentive in the required position within the working area. The bracket of the Arm supplies a 270° rotary working area.

If the equipment has been correctly dimensioned, the funnel of the Arm should be placed in vertical position 300-500 mm over the blanks to be welded. That is just above the pollutant. Thus up to 99% of the polluting particles will be caught.



Less optimal welding situation.



Always check that the correct volume of air is extracted by the suction head/funnel.

The Arm does not work if …
- unauthorised parts have been mounted on the Arm (e.g. power point on the funnel)
- the Arm is pushed towards the required position. Instead, please move the Arm to the required position and wait a moment until the friction discs have locked the Arm. If this does

not work, please tighten the loose joint with two 17 mm fixed spanners.
- something has been hung on the extension arm. It is only meant to be capable of carrying the weight of the actual Arm.

4.0 Maintenance

Periodic maintenance

- When it becomes difficult to position the Arm, e.g. if it will not remain in the required position, please adjust the movable joints (please refer to item 2).
- Please check the condition of the hose, the spring as well as the friction discs, and exchange them if necessary. Please contact your dealer in respect of spare parts.

At least once annually, the whole point extraction plant should be overhauled by an authorised serviceman.

5.0 Liability

Warranty
Geovent A/S grants a warranty for products, which are defective, when it can be proved that the defects are due to poor manufacture or materials on the part of Geovent. The warranty comprises remedial action (reparation or exchange) until one year after date of shipment. No claims can be made against Geovent A/S in relation to loss of earnings or consequential loss as a result of defects on products from Geovent.

Wear parts like hoses, etc. are not included in the warranty.
User liability
In order for Geovent to be capable of granting the declared warranty, the user/fitter must follow this Instruction Manual in all respects.

Under no circumstances may the products be changed in any way, without prior written agreement with Geovent A/S.

6.0 Declaration of conformity

The manufacturer: GEOVENT A/S
HOVEDGADEN 86
DK-8831 LØGSTRUP

hereby declares that:

The products: Extraction Arms
Model: ASA-3 (ø50 to ø200)

have been manufactured in compliance with the directions of the Directive Council of 14 June 1989 in common approximation to the legislation of the member states regarding machine safety (89/392/EEC amended by the directive 91/368/EEC) with special reference to appendix 1 in the Directive regarding basic health and safety requirements in connection with the construction and manufacturing of machinery.

GEOVENT A/S • HOVEDGADEN 86 • DK-8831 LØGSTRUP

Position: Managing Director
Name: Steen Molsen

Date: 24/11-2005

Signature:

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